

**STATEMENT OF WORK
FOR
AN/APS-148 SEAVUE™ RADAR SYSTEM
Rev A**

1.0 SCOPE

This Statement of Work describes the tasks, products, and services required to deliver the following: Receiver-Exciter-Synchronizer Processor (RESP), Antenna, Radar Control Unit, Nav Data Converter, System Management System (SMS) computer, Keyboard/Trackball, Video Converter, Video Encoder, and SMS Touch Entry Display for the SEAVUE™ Radar System.

2.0 APPLICABLE DOCUMENTS

Drawings

Radar Weapon Replacble Assemblies (WRAs)

RESP	Part No. 4974783-1	Latest Rev
Antenna	Part No. 4974778-1	Latest Rev
Radar Control Unit	Part No. 3176926-1	Latest Rev
Nav Data Converter	Part No. 1994359-3	Latest Rev

SMS WRAs

SMS Computer	Part No. 200642-100	Latest Rev
Keyboard/Trackball	Part No. 1990287-14	Latest Rev
Video Converter	Part No. 1996368-5	Latest Rev
Video Encoder	Part No. 4974819-1	Latest Rev
SMS Touch Entry Display	Part No. 1990287-15	Latest Rev

Specification

Work to be accomplished under this SOW shall be performed using best commercial practices. Current issues of all applicable documents that include, but are not limited to those listed in this SOW, are to be used for reference purposes only. Performance requirements that are called out as a part of this SOW shall be adhered to. However, processes described in the referenced documents to achieve performance specifications should be used only if commercial processes are less practical or less economical.

MIL-STD-810	Environmental Conditions for Airborne Equipment. Latest Rev
ISO-9001	International Standards for Organizations (ISO) series 9001 For Design Activities.

3.0 REQUIREMENTS

The contractor shall manufacture test, and deliver three (3) complete ship-sets of the above material in accordance with the drawings, cites in paragraph 2.0. The Contractor shall provide, as an option, one (1) complete ship set, to be exercised within 60 days from the contract date of the original ship sets. A complete set is comprised of one (1) of each of the part numbers listed under paragraph 2.0 herein. Deliveries will be in accordance with the delivery schedule.

3.1 SURVEILLANCE MANAGEMENT SYSTEM (SMS)

The Surveillance Management System is composed of the equipment listed in paragraph 2.0. The computer shall have a removable hard drive, a spare hard drive, a re-writable CD-ROM drive, and SMS software with license. The requirements for the SMS shall meet or exceed requirements provided in Exhibit B.

3.2 LOGISTICS SUPPORT ANALYSIS/LOGISTICS MANAGEMENT INFORMATION

The contractor shall complete a Logistics Support Analysis (LSA) for the SEAVUE™ Radar System. The LSA shall be submitted in accordance with Contract Data Requirement List (CDRL) C001.

3.3 QUALITY ASSURANCE

The contractor shall assure quality through implementation of a quality program typical of ISO-9001. The contractor shall establish and maintain a quality program to ensure quality in the design and manufacturing of its quality program to ensure quality in the design and manufacturing of its products, and processes as well as the quality of vendor/contractor suppliers.

3.4 ENGINEERING

The contractor shall perform all engineering, and testing necessary to provide operational systems WRAs for installation onto the Special Projects aircraft.

3.4.1 SYSTEM ENGINEERING

The contractor shall participate with the Navy to identify and mitigate program risk. The contractor shall have an internal program to manage and mitigate their technical risk. Information connected with the contractor's risk assessment shall be reported at Technical Management Reviews (PMR).

3.5 RELIABILITY

The contractor shall document, track, address/resolve the SeaVue radar RESP, Antenna, and SMS WRA level failures that occur during formal testing, factory acceptance testing, and warranty returns in accordance with its existing internal Failure Reporting, Analysis, and Corrective Action System.

3.6 CORROSION PROTECTION

All assemblies, installations, ad interfaces resulting in bonding or involving cutting or drilling of metal parts shall be accomplished in accordance with best commercial corrosion protection practices. Guidance can be found in MIL-STD-810.

3.7 TEST PROGRAM

The Government reserves the right to observe system WRA sell-off testing of the SeaVue radar (RESP & Antenna) and SMS at the contractor facilities. The contractor shall notify the Government 15 workdays in advance of production factory acceptance testing.

3.7.1 FACTORY ACCEPTANCE TEST

The contractor shall perform a Factory Acceptance Test on the SeaVue RESP and Antenna, and SMS. A contractor provided display set may be used for this test.

The system WRA Acceptance Test Results will be submitted in accordance with CDRL C002. Upon successfully completion of Factory WRA Acceptance Test, the system will be considered Government-owned equipment.

3.7.2 TESTING

NAVAIR Statement of Work to be included with SeaVue/SMS Spares Contract. The contractor shall provide NAVAIR performance oversight, coordination, and engineering support for the SeaVue/SMS systems aircraft installation, ground test, and flight test. NAVAIR coordination of assets, personnel, and training with Raytheon McKinney is required. NAVAIR procures Government Furnished Equipment necessary for the integration of the SeaVue/SMS systems. NAVAIR attendance is required at Program Management Reviews (PMRs) and Technical Interchange Meetings (TIMs). NAVAIR engineering support is required in order to make decisions on obsolescence and to determine future program growth opportunities for the SeaVue/SMS systems.

The following table shows the estimated cost elements for this effort that are incorporated into the total firm-fixed price of the contract [Contractor to insert data in the table]:

3.8 WARRANTY

The Contractor shall provide a 12-month warranty on the SeaVue Radar and SMS WRAs, commencing upon shipment of the syetem set of WRAs from the Raytheon McKinney dock.

3.9 AIRCRAFT TEST SUPPORT

The Contractor shall provide radar ground test and flight test support for the workdays required at WACO or Pax River facilities.

4.0 PROGRAM PLANNING

4.1 MANAGEMENT ORGANIZATION

The Contractor shall maintain a formal management organization responsible for accomplishing the required tasks and activities of the program as defined in this SOW, and shall designate a Program Manager who will be primary focal point for all required program information. The contractor shall implement all necessary controls, practices, and techniques defined in the SOW. The contractor shall be responsible for planning, monitoring, and control of technical and schedule performance.

4.2 PROGRAM SCHEDULE

The contractor shall prepare, and maintain a Master Schedule of events planned to occur throughout the contract period. The contractor shall maintain a scheduling system showing major activities required to relate the schedule to technical performance, and progress. All schedules shall be based on the SOW tasks.

4.3 CONTRACTOR WORK BREAKDOWN STRUCTURE (CWBS)

The contractor shall develop and maintain a complete CWBS in the contractor format. The CWBS shall be the framework for contract planning, management status, schedule and technical performance. The contractor shall develop and maintain the CWBS and CWBS dictionary.

Contract modifications shall be incorporated into appropriate CWBS elements for work package identification, and definition. The contractor shall update the CWBS and dictionary as determined necessary by the contractor.

4.4 RISK MANAGEMENT PROGRAM

The contractor shall implement and maintain a Risk Management Program in accordance with its own internal procedures tailored to the Special Projects Program.

4.5 CONFIGURATION MANAGEMENT

The contractor shall utilize Configuration Management Plan (CMP) created under Delivery Order 41, Contract 97D8085.

4.5.1 CONFIGURATION IDENTIFICATION

Configuration item identification shall be achieved by means of documentation and numbering, titling, and revision level in accordance with contractors' existing procedures.

4.5.2 CONFIGURATION CONTROL

The contractor shall apply internal configuration control to the hardware and executable software documentation for the SEAVUE RESP, Antenna, and SMS. The contractor shall utilize the established configuration baseline from D.O. 41. The baseline shall be controlled and maintained for the duration of the contract by the contractor's existing internal procedures. The baseline will be updated to reflect the specifications outlined in Exhibits A and B. Any software or hardware changes occurring after the D.O. 41 configuration will be retrofitted to the initial systems to maintain a single configuration based on terms to be agreed. Any software or hardware changes driven by obsolescence and/or producibility may require provisioning through over and above tasking. An internal contractor As-Built Configuration Record (ABCR) shall be maintained for each end item delivered. The ABCR will not be delivered to the Government.

4.6 DATA MANAGEMENT

The contractor shall provide reports and technical data and other deliverables as defined in the CDRLs in Exhibit C. The contractor shall be responsible for the data management effort and shall maintain a data management status database that is used to track due-dates, submittal dates and other pertinent information as required. The contractor shall provide controls for data preparation to prevent duplication of data previously developed.

4.7 PROGRAM REVIEWS

The Contractor shall plan for and host two (2) combined PMR/TIM reviews at McKinney, TX. Dates are in accordance with the schedule (TBD).